



**King Abdulaziz University
Clinical Skills & Simulation Center**

Clinical Skills & Simulation Center Educational Programs



Introduction

The Clinical Skills & Simulation Center (CSSC) at King Abdulaziz University (KAU) is a state of the art training center that offers specialized training of medical students, physicians, nurses and other healthcare professionals. In the center, participants evaluate and diagnose patients through teaching models that incorporate the use of actor-patient and computerized manikin that simulate disease. CSSC provides opportunities for simulation-based hands-on training in a safe and challenging learning environment.

CSSC also provides courses which can enhance the skills and improve the knowledge of those people in the medical field who are interested to join. These courses are usually accredited by the Saudi Commission of Health Specialties for many years.

In 2016, CSSC as a leading national training center have received international accreditation from Royal College of Canada and Society for Simulation in Healthcare which has been proudly added to the center's international achievements.





Vision

The vision of KAU-CSSC is to be the benchmark in Professional Health Training and Simulation in the Middle East.

Mission

KAU-CSSC is committed to provide high quality Health Training Programs and to promote scholarly activities and community engagement

Activities

- Risk Free and Hands-on part task training
- OSCE's and High Stake Exams
- Standardized Patients Program
- Virtual Simulation
- High Fidelity Simulation Program
- Advanced AV Management
- Life Support Programs
- Community Awareness Programs



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Team Training Courses



Train of Trainer for Simulation-Based Rapid Response-Crisis Resource Management Course

About the course

Full intensive course intended to give participants opportunities to learn and apply complex problem solving skills, decision making, crisis resource management and teamwork behaviors during multiple simulated clinical encounters.

Course Objectives

By the end of this course, participants are expected to:

- Understand basic principle of simulation based education.
- Practice basic debriefing within highly interactive small group.
- Reflect on their role in approaching leadership and effective communication (CRM Principles)
- Understand the importance of confidentiality and fiction contract.

Target Participants

All first line critical event responders:

- ED Physicians
- Critical Care Physicians
- Anesthesiologists
- Experienced Nurses
- Experienced Technicians
- Paramedics
- All Residents



Train of Trainer for Personal Protective Equipment Workshop

About the course

Interdisciplinary Team-Based training program specifically developed to enhance first line healthcare providers' competence to deal with high risk infectious cases.

The program is designed to enhance Mers-CoV, H1N1, Ebola, PPE competency & checklist to improve participant's knowledge of donning PPE according to current CDC protocols and increase self-confidence in providing optimal safe care for patients.

Course Objectives

By the end of this workshop, participants will be able to:

- Comprehend and apply the concepts of simulation by training in PPE.
- Demonstrate the use of basic debriefing skills.
- Recognize the clinical presentation of Ebola & Mers-CoV.
- Demonstrate Donning & Doffing procedures.
- Provide appropriate PPE observation skills during simulation for healthcare workers.



Target Participants

KAUH Healthcare Providers in High- Risk areas (ED, ICU)

- Doctors
- Nurses
- Other Healthcare Workers



Simulation- Based Rapid Response-Crisis Resource Management Course

About the course

This workshop helps to reduce mistakes in medicine, thereby, increasing the patient safety. This course aims to develop crisis management skills relevant to all emergency and potential emergency situations that may take place in anesthetic and other practice locations. Educational sessions and practical hands-on skill stations complement the realistic critical event scenarios played out in fully equipped simulated environment.

Course Description

Full intensive course intended to give participants opportunities to learn and apply complex problem solving skills, decision making, crisis resources management and teamwork behaviors during simulated clinical encounter.

Course Objectives

By the end of the workshop and after participating in the activities participant will be expected to:

1. Improve their technical and theoretical cognitive and professional skills in realistic and complex medical situations.

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2. Update their approach to management of critically ill patient.
 3. Review common complications of medical and surgical interventions in critically ill patients.
 4. Reflect their role in approaching leadership and effective communication through highly interactive small group debriefing under strict confidentiality.

Target Participants

All first-line critical event responders:

- Critical Care Physicians
- Anesthesiologists
- ER Physicians
- Experienced Nurses
- Experienced Technicians
- All Residents (Anesthesia, ER, Surgery, Internal Medicine)



Personal Protective Equipment Workshop

Course Description

Interdisciplinary Team-Based training program specifically developed to enhance first line healthcare providers' competence to deal with high risk infectious cases.

The program is designed to enhance Mers-CoV, H1N1, Ebola, PPE competency & checklist to improve participant's knowledge of donning PPE according to current CDC protocols and increase self- confidence in providing optimal safe care for patients.

Course Objectives

By the end of this workshop, you will be able to:

1. Recognize the clinical presentation of Ebola, Mers-CoV and H1N1.
2. Understand PPE principles.
3. Demonstrate appropriate PPE practice (Donning and Doffing) for healthcare workers.
4. Demonstrate appropriate maintenance of PPE while providing patient care.

Target Participants

KAUH Healthcare Providers in High- Risk areas (ED, ICU)

- Doctors
- Nurses
- Other Healthcare Workers

Difficult Airway Management Workshop

Course Objectives

By the end of the workshop and after participating in the activities, candidate will be expected to:

1. Discuss the difficult airway algorithm and the pathway used from assessment to intubation in routine and urgent cases.
2. Apply the algorithm to different clinical scenarios.
3. Perform many of the included approaches to airway management.
4. Participate in management of a realistic Difficult Airway Simulation Scenario.

Topics

- Awake intubation
- Definition and terms
- Airway assessment
- The general ASA algorithm
- The practical techniques to use different airway tools, such as:
 - LMAs
 - Airtraq
 - Fiberoptic Intubation
 - Glideoscopy
 - Laryngeal Airway
 - Trachealight Intubation
 - Retromolar Scope
 - Senso-scope



Crisis Resource Management in Anesthesia

About the Course

- Crisis Resource Management (CRM) aims to coordinate, utilize and apply all available resources to optimize patient safety outcomes.
- Resources include all people involved with all their skills, abilities and attitudes, in addition to equipment.
- CRM is about avoiding errors as soon as possible and minimizing the negative consequences of errors which have already occurred.
- Full intensive course intended to give participants opportunities to learn and apply complex problem solving skills, decision making, crisis resource management and teamwork behaviors during multiple simulated clinical encounters.

Course Objectives

By the end of this course, participants are expected to:

- Improve their technical, cognitive and professional skills in the recognition and treatment of realistic and complex medical situations.
- Manage per-operative critical events with up to date technique in a safe learning environment.
- Reflect on their role in approaching leadership and effective communication with highly interactive small group debriefing under strict confidentiality.



Target Participants

- Anesthesiologists (Consultants, Senior Registrars, Registrars and Specialists).
- Critical care physician dealing with peri-operative patients.
- Experienced Anesthesia & Critical Care Nurses and Technicians.
- Anesthesia Residents



Utilizing Simulation for Patient Safety Workshop

Course Description

This continuing education course will introduce doctors, nurses, paramedics, and related health professions to best methods in utilizing different levels of simulation, low to high fidelity, in faculty development programs and quality improvement patient safety programs.

Course Objectives

By the end of this workshop, participants will be able to:

- Discuss roles of simulation in patient safety
- Relate to showcases of different institutions experiences to their own experience!
- Practice constructing a simulation based program with low fidelity simulation in small group exercise with expert facilitator
- Practice a safety-oriented high fidelity simulation scenario design and debrief, in small group exercise with expert facilitator
- Collaborate with different participants with vast experience of managing patient safety promoting programs.



Target Participants

- Physicians
- Interns
- Nurses
- Pharmacists
- Physiotherapists
- Technicians
- Quality & Safety Officers



Specific Critical Care / Emergency Care Courses



Fundamental Critical Care Support Course (Adult)

About the Course

A two-day comprehensive course addressing fundamental management principles for the first 24 hours of critical care.

Course Purpose

- To better prepare the non-intensivist for the first 24 hours of management of the critically ill patient until transfer or appropriate critical care consultation can be arranged.
- To prepare nurses and other critical care practitioners as well as non critical care staff to deal with acute deterioration of the critically ill patient.

Course Objectives

- Prioritize assessment needs for the critically ill patient.
- Select appropriate diagnostic tests
- Identify and respond to significant changes in the unstable patient.
- Recognize and initiate management of acute life-threatening conditions.
- Determine the need for expert consultation and/or patient transfer and prepare the practitioner for optimally accomplishing transfer.

✚ LECTURES AND SKILL STATIONS PREPARED UNDER THE AUSPICES OF AMERICAN SOCIETY OF CRITICAL CARE.



Course Description

- Pre & Post tests
- 17 didactic lectures
- Companion textbook
- 9 case based skill stations
- Certificate of successful course completion
- Requirements for successful course completion by ASCC

Target Participants

- Critical Care Fellows
- General Practitioners
- Specialists / Residents
- Respiratory Therapists
- Advanced Practice Nurses
- Family Medicine Physicians
- Emergency Medicine Physicians



Pediatric Fundamental Critical Care Support Simulation Course

Course Description

PFCCS addresses management principles for the first 24 hours of critical care of the pediatric patient. It also provides an excellent foundation for Residents and other trainees and includes:

- ✓ Comprehensive textbook
- ✓ Pre-test
- ✓ Post-test

Topics

- Introduction to course
- Fluids and Electrolytes
- Neurological Emergencies
- Management of Trauma in Children
- Diagnosis and Management of Acute Infections
- Cardiovascular Evaluation and Management of Shock



Target Participants

- Critical Care Fellows
- General Practitioners
- Respiratory Therapists
- Family Medicine Physicians
- Emergency Medicine Physicians
- Pediatrics Specialists / Residents
- Nursing care for complex or potentially unstable patients
- Advanced Practice Nurses with limited pediatric practice